

WHAT IS CLAIMED IS:

- SUB
B33
1. A method for producing an assembly of substrates comprising:
dispensing a liquid polymeric material between a conducting surface on a first substantially planar substrate and a conducting surface on a second substantially planar substrate, the liquid polymeric being disposed inwardly from the edges of the first and the second substrate;
pressing the liquid polymeric material between the first and the second substrate so that the liquid polymeric material flows towards the edges of the first substrate and the second substrate; and
curing the liquid polymeric material.
 2. The method of Claim 1 further comprising contacting the conducting surface on the first substrate and the conducting surface on the second substrate after pressing the liquid polymeric material between the first substrate and the second substrate.
 3. The method of Claim 1 wherein the liquid polymeric material is dispensed on dies present on the first or second substrate.
 4. The method of Claim 1 wherein at least one of the substrates has a planar surface area of at least about 36 sq. inches.
 5. The method of Claim 1 wherein said conducting surface of said first planar substrate includes first conductive pads, and said conducting surface of said second planar substrate includes second conductive pads and solder bumps disposed on said second conductive pads.
 6. The method of Claim 5 wherein said solder bumps comprise a solder material fluxing agent.
 7. The method of Claim 6 wherein said liquid polymeric material comprises a polymer fluxing agent.

Sub B3/ 8. The method of Claim 1 wherein said liquid polymeric material comprises a polymer fluxing agent.

9. The method of Claim 5 wherein said solder bumps includes no solder material fluxing agent and said liquid polymeric material comprises a polymer fluxing agent.

Sub a1 Sub B3/ 10. The method of Claim 6 wherein said polymer fluxing agent comprises a beta phenylacid and/or a beta phenylhydroxyacid.

11. The method of Claim 9 wherein said polymer fluxing agent comprises a beta phenylacid and/or a beta phenylhydroxyacid.

12. The method of Claim 10 wherein said beta phenylacid is selected from the group consisting of beta phenylacetic acid, beta phenylacrylic acid, beta phenylcrotonic acid, and mixtures thereof.

13. The method of Claim 11 wherein said beta phenylacid is selected from the group consisting of beta phenylacetic acid, beta phenylacrylic acid, beta phenylcrotonic acid, and mixtures thereof.

Sub a2 14. The method of Claim 10 wherein said beta phenylacid comprises beta phenylacrylic acid and said beta phenylhydroxyacid comprises beta phenylhydroxyacrylic acid.

15. The method of Claim 11 wherein said beta phenylacid comprises beta phenylacrylic acid and said beta phenylhydroxyacid comprises beta phenylhydroxyacrylic acid.

Sub B3/ 16. The method of Claim 1 wherein said liquid polymeric material comprises from about 15% by weight to about 70% by weight of a polymeric resin, from about 15% by weight to about 70% by weight of a curing agent, and from about 0.10% by weight to about 20% by weight of a fluxing agent.

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17. A polymeric composition comprising from about 15% by weight to about 70% by weight of a polymeric resin, from about 15% by weight to about 70% by weight of a curing agent, and from about 0.10% by weight to about 20% by weight of a fluxing agent.

18. An assembly of substrates comprising a lower substrate; a polymeric composition disposed on said lower substrate; and an upper substrate disposed on said polymeric composition which comprises from about 15% by weight to about 70% by weight of a polymeric resin, from about 15% by weight to about 70% by weight of a curing agent, and from about 0.10% by weight to about 20% by weight of a fluxing agent.

19. The polymeric composition of Claim 17 wherein said fluxing agent comprises a beta phenylacid selected from the group consisting of beta phenylacetic acid, beta phenylacrylic acid, beta phenylcrotonic acid, and mixtures thereof.

20. The assembly of Claim 18 wherein said fluxing agent comprises a beta phenylacid selected from the group consisting of beta phenylacetic acid, beta phenylacrylic acid, beta phenylcrotonic acid, and mixtures thereof.